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ABSTRACT

Schools and school districts throughout the nation are developing and implementing educational programs designed to improve teaching, learning, and school management. This report provides a description of how schools and school districts in various parts of the country are developing and implementing improvement programs, based on their own definition of identified needs. Each of the 13 programs presented at a symposium designed to showcase examples of constructive reform in U.S. education is described. So that the programs may be regarded as models for replication, each description begins with the problem addressed or the motivation for initiating the program. The program's features, its research base or the intellectual history that supports it, and the evidence for the success of the program. Implications for federal policy and legislation are included with lessons from the project. Each description ends with names and addresses for further information. (MLF)

[COMMITTEE PRINT]

WHAT IS WORKING IN EDUCATION: A SYMPOSIUM

COMMITTEE ON EDUCATION AND LABOR HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

NOVEMBER 1990

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AUGUSTUS F. HAWKINS, *Chairman*

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PREFACE

Schools and school districts throughout the Nation are developing and implementing educational programs designed to improve teaching, learning and school management. The major purpose of such improvement efforts, based on evolving research, is aimed at effectively teaching the school's curriculum to all students. This is accomplished by a school district's focusing on its unique needs.

This report provides a description of how schools and school districts in various parts of the country are developing and implementing improvement programs, based on their own definition of identified needs.

It is important that members of the Education and Labor Committee have access to this report. This report will also be useful to educators, interested citizens, and others in learning how a select number of school districts adopted school improvement methods and thereby assisted their students in improving their academic achievements and academic performances.

I believe that this report will be helpful in assisting the members of this committee in addressing avenues of Federal assistance in improving the Nation's schools, as part of the committee's oversight and legislative purpose.

AUGUSTUS F. HAWKINS,
Chairman, Committee on Education and Labor.

Introduction

On Friday May 4, 1990, the House Education and Labor Committee, Augustus F. Hawkins, Chair, hosted a symposium entitled "What Is Working in Education." It was designed to showcase examples of constructive reform in U.S. education. This report describes each of the 13 programs represented at the symposium.

These programs, which included schools, programs within schools, districts, national and State projects, were chosen to demonstrate that all is not gloom in American education. Despite widely publicized indicators of failure, the system is not bankrupt. People across the nation are creatively solving the problems of motivating students, giving them the tools to face the future, re-energizing the teaching profession, and bringing community resources to support the schools. These 13 projects should be seen as representatives of a large pool of extraordinarily diverse programs which are making school a success for the children who attend them.

So that the programs may be regarded as models for replication, the descriptions are generally organized in the same way. Each description begins with the problem addressed or the motivation for initiating the program. Then it describes the program's features, its research base or the intellectual history that supports it, and the evidence for the success of the program. Implications for Federal policy and legislation are then included with lessons from the project. Each description ends with names and addresses for further information.

The 4 May symposium was put together by a diverse group of education organizations in Washington. It is a sign of the fundamental health of the U.S. education system that a handful of organizations could identify many more projects than could be accommodated in one day's workshops, and, further, that they were not programs which everyone knows about from media coverage. The projects represent the responsiveness of educational units to ideas and opportunities and their potential to overcome the present crisis in education, given the support and resources they need.

What is Working in Education

The Planning Committee and the sponsors of WHAT IS WORKING IN EDUCATION gratefully acknowledge the generosity of the American Association of School Administrators and the National School Boards Association.

PLANNING COMMITTEE

Santa Fe Public Schools and New Mexico Department of Education

Problems at the school and State level

As a result of intensive self-examination, the Santa Fe (New Mexico) Public Schools perceived that in general schools have not changed over 70 years, although the conditions and context of education are radically different for everyone involved. The personnel of the schools, from classroom teachers through the Superintendent, realized that there were two main kinds of problems: inside the classroom, students were bored and apathetic, their intellectual capacity not challenged and their individual learning needs ignored; within the school and the district, the decisions were made at the central office and state level, with a pervading sense of powerlessness on the part of teachers and site administrators.

The Department of Education in New Mexico realized that their stranglehold on the schools in the form of restrictions, regulations, and requirements was contributing to the schools' inability to prepare students for either the workforce or further education.

Program features

The Santa Fe Public Schools joined the Panasonic (formerly Matsushita) Foundation's Partnerships and began a process of returning decisions about curriculum and instruction to the school sites. At the same time, New Mexico joined the Re:Learning Program, jointly sponsored by the Coalition of Essential Schools (CES) and the Education Commission of the States (ECS). Specific program features are:

At Sweeney Elementary School the principal has been replaced by a committee of teachers who share administrative responsibility. The teachers are reshaping the curriculum with the help of the Prospect Center, eliminating pull-out programs and tracking, and experimenting with narrative report cards. There is a one-hour per day core program in which all students participate in interdisciplinary ungraded groups. Parents are included in all discussions of proposed changes, and the school maintains a focus on the individual child.

In the Santa Fe school district, a school-based management project encourages schools to initiate programs developed by teachers and supported by administration, the board, and parents. Three schools have selected their own principals, in addition to Sweeney which elected not to have a principal. Teachers participate in the hiring of other teachers. At Capital High School, the English/language arts and history curricula have been replaced with an interdisciplinary program called Gateways, which is organized by themes and includes writing as a tool of learning. It has been piloted in the 1989-90 school year and will go into full operation in

1990–91. Secondary schools now offer "zero hour" classes, so that students who need to work can complete a full schedule by early afternoon and then go to their jobs.

The New Mexico State Department of Education has held meetings with the technical assistance of the Panasonic Foundation to reformulate its role from regulation to providing support and resources. This includes rethinking the state's assessment program and encouraging applications for waivers.

Intellectual history

The Panasonic Foundation Partnerships and the ECS/CES Re:Learning Program both based on a strong theoretical base of work by Theodore Sizer (founder of the Coalition for Essential Schools); Phillip C. Schlechty, of the Louisville, KY, Center for School Leadership; Roland S. Barth of the principals' Center at Harvard University; and Deborah Meier, principal of the Central Park East Schools in New York City.

A feature of both the Partnerships and Re:Learning is cross-fertilization by bringing personnel to Santa Fe from other schools and districts engaged in restructuring and curriculum reform, and also by sending Santa Fe personnel to observe in other schools, such as members of the Coalition for Essential Schools.

Evidence of Success

At Sweeney Elementary School, 26 learning disabled students are in regular classrooms for basic daily instruction, and 27 students classified as slow are mainstreamed for between two hours a day and the entire day. Assessments have demonstrated that academic achievement has improved, so that the number of students eligible for Chapter 1 (no longer a pullout program) has dropped. Since January 1989, absenteeism has dropped by about 17%, and discipline problems are handled on the spot with the assistance of parents who have been involved in planning how to deal with them.

At other Santa Fe schools, restructuring is voluntary, but all schools are participating, with parents, teachers, administrators, and students working together. The "zero hour"classes at Santa Fe High School have 400 enrollees, and only two dropped out in the 1989–90 school year. The Capital High School Gateways program even in its preliminary form has reduced the absentee rate by 50%, has virtually eliminated discipline referrals and suspensions, and had only one dropout in 1989–90. In a program for teenagers, the reading level rose in one year from grade 4–5 to grade 8 level.

Lessons learned and recommendations

- Schools and districts should be assisted in applying for waivers from state and federal agencies, and these agencies should encourage applications, so that creative programs do not run into regulatory roadblocks.
- Funds should be available to provide teachers and administrators with paid planning time.
- There should be a nationwide clearinghouse or information network on school restructuring and reform.
- Assessment alternatives should be developed to replace multiple-choice, norm-referenced testing.

- Teachers should be provided additional training in new educational developments such as the teaching of thinking skills, cross-grade interactions, multidisciplinary programs, cooperative learning, and individualizing instruction.
- For additional information, please contact: Santa Fe Public Schools, 610 Alta Vista, Santa Fe, NM 87501;
- Re: Learning and School Improvement Program, same address. Panasonic Foundation, One Panasonic Way, Secaucus, NJ 07094.

Public School 41, Brooklyn, NY: Success and Achievement in Learning—Project Sail

Project Sail (Success and Achievement in Learning)
Public School 41
Community School District #32,
Brooklyn, New York

Public School 41, located in the Ocean Hill-Brownsville section of Brooklyn, is a Chapter 1 eligible school of approximately 1,000 students. The pupil population, which reflects the community, is 89 percent Black and 11 percent Hispanic. Amost all students are eligible for free breakfast and lunch. Public subsidized housing dominates, although some private housing is beginning to develop.

In Spring 1986, Public School 41 was offered the opportunity to develop a new, pilot program allowing for non-graded education. Sponsored by the United Federation of Teachers, the idea was approved by the New York City Board of Education. The Board agreed to allow the teachers, administrators and parents to work cooperatively to develop a shared decision making model to implement their non-graded program.

The staff and parents participated in a weekend retreat to begin development of a plan to present to the Board at its June meeting. The details of the program were worked out during in-school and after school meetings and workshops, and the plan received Board approval.

Through the processes of shared decision making and school based management, teachers are actively involved in the decisions that affect them. As one teacher said, "We OWN Project SAIL and the result is that we give more than 100 percent!" Shared decision making is assured through the establishment of administrative committees made up of parents, teachers and administrators. The committees are: School Organization and Scheduling, Curriculum and Material, Parental Involvement, Staff Development, and Evaluation and Assessment.

In its third year, the project incorporates many elements that are creative and experimental in nature. All classrooms have learning centers. The language arts curriculum is now based on the whole language and literature-based approach. Core teaching has been instituted, whereby up to three or four groups of teachers and classes work together on special projects. The science program is hands-on; the mathematics program stresses the use of manipulatives. There is ongoing pupil evaluation assessment without the pressure of a grade system; new evaluation measures have been developed. And, most importantly, the stigma of early failure has been removed.

Parents support and actively participate in the project. They serve as committee members and classroom assistants. They par-

ticipate in training. A parental involvement program called Open Doors has resulted in thirty-one parents working on a daily basis in classrooms.

For additional information, contact:

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PITTSBURGH PUBLIC SCHOOLS, PITTSBURGH, PA: PROJECT LIAISON

Problem addressed

Research has clearly demonstrated that disabled individuals have been, and still are, consistently underrepresented in the work force. Project Liaison is an attempt to increase handicapped students access and success in high school level vocational programs which will lead eventually toward a higher level of employment.

Program features

In 1967, in anticipation of monies becoming available to support disabled students in Vocational Education, the Pittsburgh Public Schools surveyed disabled students in the district to determine how many were involved in Vocational Education programs. The survey noted that only 20% of disabled students were, in fact, in Vocational Education and that this 20% was selected from one part of the city which was known for its blue collar tradition. Many of these students already had skills which they had learned from their parents. Based on this survey, federal money, through the 1968 amendment to the 1963 Vocational Education Act, was secured to begin Project Liaison, a project with the following goals.

1. To increase the number of disabled students in Vocational Education programs by helping these students select appropriate Vocational Education courses.
2. To support these students while in Vocational Education programs so that they could learn a skill.
3. To provide transitioning services which would allow these students to successfully move from school into the work force or further Vocational training.

Project Liaison has grown and evolved since 1968. Currently, the project supports all 1,200 secondary disabled students within the Pittsburgh schools.

A key component of the project is the use and duties of 13 rehabilitation counselors.

A. Vocational evaluation

In order to help students select an appropriate vocational objective, the rehabilitation counselor manages a vocational evaluation process which includes enrollment and evaluation of exploratory pre-vocational programs during the 9th and 10th grades. Students are provided specialized vocational interest testing if necessary utilizing the Reading Free Vocational Interest Survey. Students with

high enough academic skills are provided an APTICOM vocational evaluation.

B. Support while in the program

While the students are attending a vocational program, the project provides support through the use of six paraprofessionals who attend the vocational classes along with handicapped students. These paraprofessionals model good student behavior and reinforce the student's learning in the vocational class. The rehabilitation counselor provides emotional support and teacher consultation while the student is in the program. During the early years of Project Liaison, vocational teachers were an integral part of the staff and were used to modify vocational curriculum so that disabled as well as other low functioning students could better succeed in the vocational courses.

C. Transitioning

The project has always viewed transitioning as a major function. Relationships are close with the local Office of Vocational Rehabilitation and students are referred both individually and with a back-up computerized referral system. Community agencies provide supportive employment on a contractual basis. As can be seen, mainstream vocational programs were developed first and an attempt is made to mainstream as many students as possible with support. In the third year of the project, due to its success, the salaries of the rehabilitation counselors were moved from Federal monies to State Special Education funding where they remain today. The freed up Federal monies were then used to develop special vocational programs for disabled students who could not succeed in our mainstream programs even with support. In all cases, the IEP, and soon, the written individualized transition plan (ITP) is developed in conjunction with the parent who detemines the method of delivery of vocational services.

Intellectual history

The philosophical basis for Project Liaison probably begins with the work of Wolfensberger in the 1960's with the concept of "normalization." This concept stresses the notion that disabled persons should be treated as much like the normal population as possible. The 1968 amendments to the 1963 Vocational Education Act set aside monies to encourage the integration of disabled students into vocational education while the Right to Education concent decree in Pennsylvania led to an increase in the numbers of disabled students in the school system. The combination of these factors lead to the notion that disabled students should be provided vocational education in the public schools, in mainstream environments whenever possible.

Evidence of Success

Prior to the Project, only 37% of handicapped students were in vocational education. This figure now hoovers yearly around 70%. The Pittsburgh School District has recently decided to eliminate the "general education diploma." Thus, all students must move toward either an academic or vocational certificate. With this

change, we expect that in future years 95% of our handicapped students will be vocational students.

Before the beginning of the project, a small number (81) of highly selected students achieved a quality point average of 1.6 on a 4 point scale in vocational classes. Now, approximately 200 mildly handicapped students and over 50 moderately and severely handicapped students achieve a quality point average of approximately 2.0 in their Vocational courses.

Last year, which was a typical year for our urban school system, of our 133 handicapped graduates, only two were not involved in any programming and three were pregnant and or homemakers. All of the rest were either employed, many in areas in which they were trained in High School, or involved in post High School Vocational training [illegible]ally under the auspices of the Office of Vocational Rehabilitation..

Lessons Learned and Recommendations

1. State certification requirements should be modified to allow Rehabilitation Counselors to function in a public school environment.

2. Paraprofessionals can be useful members of the rehabilitation team at a significant financial savings.

3. The concept of least restrictive environment is workable as long as enough support is provided to achieve success. Without *support* "mainstreaming" is "dumping."

4. Transitioning to the adult community is a needed service. However, the gross underfunding of adult programs for the disabled make our efforts futile, especially with the severely disabled population. If supported employment, as opposed to facility based training, is the wave of the future, these programs must be funded at a level commensurate with the numbers of the disabled who need this service. SSA and SSI regulations must be further modified so that all vestiges of the disincentives to work are eliminated.

5. The probable elimination of set aside monies for the disabled in new Vocational Education legislation must be monitored very closely to ensure that the inroads made over the last 10 years by the disabled are not eroded.

6. School districts should be encouraged and incentives should be provided to use community rehabilitation agencies cooperatively in their programs.

7. The attitudes of vocational educators toward the disabled can be positively affected by including them as integral members of the support team who work with the disabled.

Additional Information

Additional information can be obtained by writing or calling Dr. Charles M. Cohen, Supervisor, Project Liaison, The Division for Exceptional Children, Pittsburgh Public Schools, Conroy Education Center, 1508 Page Street, Pittsburgh, PA 15233-2008. Telephone number (412) 323-3950.

BELRIDGE SCHOOL, MCKITTRICK, CA: NATIONAL FOUNDATION FOR THE IMPROVEMENT OF EDUCATION CHRISTA MCAULIFFE INSTITUTE FOR EDUCATIONAL PIONEERING

District and community of tomorrow today: In the Fall of 1987, the Belridge School District made a conscious decision to prepare students for the challenges of the Information Age. By analyzing the skills and training students of tomorrow's workforce would need if they were to be responsible, productive, future citizens, and combining that with principles of sound educational practice (including what is currently known about effective uses of technology in schools), DACOTT 21/20 was born.

To achieve such a challenging task, it was necessary to:

—take a close look at a multi-year planning process that would keep the district on the most effective path for the journey;
—examine the critical human factors that facilitate or inhibit change;
—recognize the power of technology as a tool for learning;
—gain community acceptance, involvement, and support of district programs;
—acknowledge the vital role that needed to be played by the school district's Governing Board.

A key thrust in the Belridge School District's restructuring efforts is the intense infusion and integration of technology into the district's educational program. Even more, Belridge believes that the central major factor of its success with the DACOTT 21/20 project is not the technology itself, but the concern and attention that has been paid to the human aspects of the change process. Technology was merely the catalyst, the chosen vehicle, for encouraging growth and change. It was the tool, provided equally to everyone—teachers, students, parents, and support staff. It was used to create, learn, and to bring everyone together as a community of learners. Trust between and among people was the real key component. DACOTT 21/20 would never have happened had it not been possible to develop a relationship of trust among the participants. That trusting environment was built *by the group and for the group.* Time and time again, the positive emotional environment at Belridge has proven itself to be the factor that makes the difference in the success or failure of change related activities that have been initiated. This emotional environment was created and maintained because the administration, staff, and community knew they needed the people component of the process to work if this change initiative (or any change initiative) was to be a success. DACOTT 21/20 is the result of a belief in the power of people . . . people who work as a team to support and nurture each other within a cor nunity of learners.

The level at which the most current state-of-the-art technologies were purchased and installed in support of the DACOTT 21/20 program identify Belridge as one of the most technology-infused school sites, per capita, in the country today. The project was designed to provide immediate access to these extremely diversified and multifaceted technologies by the students, staff, and parents of the community of learners to enable them to truly utilize technology as a tool for learning.

Belridge identified support and training for all learners as the district's priority. Without this commitment, the district would not be where it is today; without this commitment, Belridge would, like many school districts, have had a lot of very expensive and underutilized equipment taking up large amounts of space. The administration and staff at Belridge did not believe that this would have been a responsible use of taxpayers' dollars, nor would it have been a responsible way to fulfill their professional obligations to the community. Therefore, through the creation and implementation of a comprehensive, ongoing inservice and community outreach training program, Belridge's belief in and support for a risk-free learning environment was realized. This kind of learning environment reduces the threat felt by a learner of any age who is considering the incorporation of technology into his/her personal or professional life. The motto of the technology training program is to "experience it, live with it, and then manage it."

From the very beginning the DACOTT 21/20 project promoted the fact that parents and community should be actively involved in the learning process of their children and in the life of the school. Parents needed to be educated about what was taking place in the school and encouraged to become active participants in the responsibility of educating the children.

Technology was used as a focal point:

—for the encouragement of an open and positive attitude by staff towards parents and community members;
—as an equalizer of opportunities relating to socio-economic issues;
—as a key ingredient in a broad-based solutions strategy to address low test scores;
—for breathing new life into the instructional methodologies used throughout the school district.

During the initial two years of the program, many lessons have been learned about the infusion of technology into schools and the successful implementation of change in education. One important lesson has been the reaffirmation that the Governing Board and the community can be a district's greatest allies. Each step of the way, Belridge has made efforts to help the board and community find personal value in the use of the technology tools that were incorporated into the school program.

Communication was made to the board about the requirements of the project in terms of time, effort, and dollars. In addition, the board received ongoing inservice about the need to attend to the dynamics of the change process since, like all organizations, there was the natural tendency at Belridge to resist and to fear change.

To ensure the board's ongoing interest, commitment, and support for the project, the board members also were requested to become active participants in the planning process. They attended conferences and participated in school site visitations. They became learners. Board members were encouraged to share their own professional expertise. Most importantly, based upon the unique role they held in the organizational structure of the school district, they were asked to develop the necessary school policies that would become an essential component of the master plan. The policies developed by the board have been valuable tools used by the school administration and staff in carrying out their stated responsibilities relating to the school restructuring process. This involvement by the board proved crucial to the successful implementation of the first phases of the district's change process. Not only did the board actively share in the ownership of the project, but they also were provided the opportunity to experience and live with the change process that simultaneously was being experienced by school personnel. As a result, the board members became enthusiastic and informed spokespersons and visionaries for the project throughout the Belridge community and to interested educators and community members everywhere.

The Belridge five-year technology master plan represents another major step toward addressing the necessary restructuring that had to occur in the school district if it were to succeed in preparing its students for the future. The master plan is important in that it serves to solidify the district's vision and goals through the development of a well-charted roadmap. Just as the district's plans must be well-charted, so, too, must the assessment program.

In any endeavor as exciting as that underway at Belridge, there is a need for comprehensive feedback to ascertain if the vision, so carefully conceived, is working. Belridge has been administering California's standardized tests as a measure of student achievement for years. With the inception of the DACOTT 21/20 project, it was determined that an evaluation model designed specifically to measure the impact of the new program was necessary. It was felt that evaluation of the DACOTT 21/20 program should be both qualitative and quantitative, measuring not only the effects on students, but on teachers, classroom practices, and the families and home life of students as well.

Assessment

The evaluation design was developed by the University of California, Los Angeles (UCLA) Center for Technology Assessment in conjunction with Belridge administration. The design is a comprehensive, coordinated, multi-component evaluation of the impact of the DACOTT 21/20 project on Belridge staff, students, and parents.

Four basic questions guide the work:

1. What are the effects of DACOTT 21/20 on students?
2. What are the effects of DACOTT 21/20 on teachers' practices and classroom processes?
3. What are the effects of DACOTT 21/20 on the social organization of school staff responsibilities and relationships?
4. What are the effects of DACOTT 21/20 on parents' and students' home life?

Multiple methods are used to collect the information relevant to these questions.

The primary concern during the 1988–89 evaluation was to document any evidence that the DACOTT 21/20 project may have been harmful to any of its participants. A project as far-reaching as DACOTT 21/20 could in its initial year interfere with what had been successful in the past. Effective instruction could be adversely affected by the enormous task of implementing the new technologies in the school, resulting in less-than-expected academic growth for students and/or a temporary undermining of students' motivation and attitudes. Teachers' morale and energy could be strained by the demands of the project. At home, parents might initially find the home computer an interference rather than an aid.

Results and recommendations

The implementation of DACOTT 21/20 technologies required enormous time and effort on the part of every Belridge staff member, yet it appears that if any instructional time was lost, it did not affect students' academic growth. Students demonstrated expected growth or better on most tests of the ITBS. Results were less than expected on only one test of the ITBS—vocabulary, and it was recommended that Belridge provide supplementary activities that will enhance students' knowledge of vocabulary across all subject areas. Students' growth in writing appeared to be particularly strong, reflecting the emphases that teachers placed on writing.

There was no evidence of harm done to students' attitudes toward learning or their concepts of themselves as learners. The quantitative attitude measures indicated average self-reports of children's attitudes—in other words, fairly typical responses for elementary students. Some students did acknowledge occasional frustrations with technology failures, and others expressed a desire to have more options in the use of pencil and paper for completing written work. It was recommended that Belridge teachers consider providing students more opportunities to choose their writing tools.

The teachers had the enormous task of integrating the new technology into their curricula, and measures documented the diligent work and moderate level of stress experienced during the first year. Teachers reported that the first year required from them many new learnings, a necessary reordering of personal time, many emotional highs and lows, and changes in their perceptions of themselves—both as learners as well as teachers; clearly, teachers were accomplishing as much as they were and coping as well as they were in part because they felt supported, by one another and by the administrative staff. Teachers appeared to share a sense of purpose, an openness and willingness to share, a team spirit, and participative decision-making.

As a result, the teachers felt very positively about the DACOTT 21/20 project. Teachers reported favorable attitudes toward the DACOTT 21/20 project and moderate levels of satisfaction with children's academic progress and most areas of children's social progress. They were somewhat less satisfied with children's progress in cooperative work.

Teachers' reports of changes in their curricula content and coverage and in their teaching practices were largely consistent with the

results for student outcomes. Teachers spent more time in writing instruction in 1988-89 than they had in prior years and integrated reading, writing, and language arts to a greater degree. Teachers reported somewhat greater attention to math, particularly its conceptual foundations (concepts, problem-solving). Since Belridge students generally made solid growth in math as indicated in the ITBS results, teachers appeared to be meeting their objectives in this subject area.

The Belridge parents who participated in the study expressed largely positive, though thoughtful and balanced views on the impact of DACOTT 21/20 during its first year. Most of the parents agreed that technology would play a critical role in their children's futures, and that the opportunity for their children to interact with technology in school would better prepare them. Most of the parents felt that their children were more motivated and excited about school and learning than they had been in the past; parents frequently offered positive though mixed views of the effects of computer use on their children's learning. Although parents tended to feel that computer use benefited children's reading, writing, knowledge of science, there was some concern about coverage of basic math and handwriting skills in the DACOTT 21/20 high access technology environment, and some lack of clarity about the social studies curriculum.

Parents did not appear to find the computer intrusive, and most welcomed the opportunity to have one for use at home. Most family members appeared to be using the computer at least occasionally for both pleasure and work, and the DACOTT 21/20 child appeared to be a source of help and information for other family members.

Recommendations

Governments should fund research and development that will result in a mass media flood of information and articles that will support and identify innovative efforts:

—educating the greater community and getting people to rally around national, state, and local movements via media efforts that develop and reinforce attitudinal shifts necessary for changes to occur in education;
—supporting action research for those working directly with the learners, the K-12 educators;
—increasing awareness of the need for ongoing teacher training and staff development;
—Develop a national network for innovation that provides pioneering educators a resource for support information access, discussion and dissemination;
—Encourage our nation's government and business leaders to develop partnerships with practicing educators and school districts so that together they can effect positive change in school reform;
—Support for organizations like the National Foundation for The Improvement of Education's Christa McAuliffe Institute to select and prepare teachers to be national leaders within the school restructuring movement; and
—Provide greater funding for K-12 grade education.

Conclusion

In conclusion, it should be noted that Belridge is not advocating the immediate infusion of this degree of sophisticated technology for all schools. Rather, its intention in sharing the program with others is to provide a planning model that can lend support to other school districts as they create their visions for school restructuring, a vision based on their own unique educational beliefs, organizational readiness for change and financial circumstances. The Belridge School District Master Plan and video are available from the district for a nominal fee. The district will provide an information packet upon request.

For more information contact:

Gary Peterson, Ed.D., Superintendent, Cyndy Everest-Bouch, Project Director, 19447 Wagon Wheel Road, McKittrick, CA 93215, (805) 762-7381.

Learning Research Development Center, Pittsburgh, PA: Thinking Mathematics

Disseminating new knowledge about mathematics instruction: A complex collaboration

Important and relevant research about problems confronting our educational system is being conducted all over the country. However, there is a breakdown in communicating that research into the classroom where it can truly affect changes in learning. The Learning Research and Development Center (LRDC) at the University of Pittsburgh, funded in part as a Research Center by the Department of Education's Office of Educational Research and Improvement, and the American Federation of Teachers (AFT) have entered into a joint project to develop new processes to improve this communication between researchers and practitioners, especially as that practice relates to the teaching of mathematics. Thus, the Thinking Math program is twofold: getting research into practice and improving the teaching of elementary level mathematics.

This collaborative effort between two organizations with different perspectives and cultures, sets this program apart from more traditional research projects. The improved communication has led to more effective instruction increasing student learning and strengthening programs of research. The teachers and researchers spent over 100 hours in group discussion and over 140 hours in small groups of two or three. Other projects normally include about 30 hours of contact between groups. This open dialogue helps teachers interpret research applying their clinical wisdom. The teachers try the new approaches, refine them, and then share them with other teachers. The interaction continues for a year.

Phase One of the project is the Research-Instructional Practice Connection. During this phase the initial articulation of ideas connecting research and instruction are committed to paper during a four week summer workshop. Teachers draw from research the major implications for teaching and learning. The ideas are piloted the following fall in the home schools of teacher participants, and revised in a week long workshop in January.

The second phase is called "Communicating the Value of the Research-Institutional Practice Connection." Teacher training activities are developed to communicate to other teachers the value of the research-instructional practice connection. These materials are piloted during the spring and revised during a week long workshop in May.

The final phase is the ER&D network—Educational Research and Dissemination. Teachers in AFT locals are trained in using the materials developed and the broad dissemination of these materials begins. The project began with six sites to pilot test the materials.

Eventually the products will be disseminated throughout the ER&D network, a potential 550 sites.

The research findings suggest a new approach to teaching mathematics that promotes the idea that all students can learn mathematics. These research ideas suggest that teachers should embed instruction in problem solving activities; encourage students to explore, explain, and justify procedures for solving problems; and encourage discussion among the students so that they share their different approaches to solutions and articulate their reasoning in language that is understandable by their fellow students. This is not to say that children should be allowed to explore without direction in the hope that they will discover the important mathematical ideas on their own. The program of instruction is orchestrated by the teacher in an overall plan that integrates ideas to achieve particular goals.

In this project, teachers are writing and planning activities for teachers; the researchers' role is to comment, advise, and edit. An important characteristic of these teachers is that they are all veteran teachers. Some people have argued that changes in mathematics instruction will have to wait until a new generation of teachers is trained in methods that implement the research findings of the past ten years. However, the results of this project suggest the veteran teacher may be better able to implement alternative instructional techniques because they have control of the many other complex activities involved in teaching students; knowledge about students and what holds their interest, knowledge about teaching mathematics, and knowledge about instructional materials and approaches. The veterans are able to bring their own perspectives of what mathematics is and what is important for students to learn. Those in the programs felt this diversity added a richness to the discussion and enhanced the quality of the products.

One of the most significant results of the project was predisposing teachers, who traditionally are at a distance from the research community, to the value that research can contribute to instructional situations. Those teachers were also aware of the fact that research articles often include jargon and information not relevant to the realities of the classroom. This project allowed time to communicate with members of the research community over a long period of time, to obtain clarification on issues as they arose, to engage in social as well as business activities, and to have some control over the decisions that were made about events and tasks to be accomplished. All of these eased some of the uncertainty and discomfort of the initial interactions between members of the two communities and fostered a deepened respect and camaraderie. A network of resource personnel has been established on which the teachers can rely.

Two documents, *Thinking Mathematics* and *Teacher Training Activities*, are products of the 1989 and 1990 workshops. Both documents were written by teachers and the researcher's role was to comment, advise and edit. They are being pilot tested at this time and will be available through AFT's ER&D network in the fall of 1991. In addition, a scholarly book, *Analysis of Arithmetic for Mathematics*, edited by Gaea Leinhardt and Ralph Putnam will be published soon by Lawrence Erlbaum Associates. Further, two

papers presented at the American Educational Research Association's 1990 Annual Meeting are available from Drs. Bickel and Grover listed below. For more information contact:

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Coolidge High School Teaching Professions Program, Washington, DC

Washington, D.C.'s Coolidge High School provides a four-year college preparatory program for students interested in careers in teaching. It is a magnet-style program that attracts prospective teachers by offering teaching practice and pedagogical experiences throughout the four years of high school.

Problem addressed

Among the problems facing the schools in the twenty-first century, and even before, one is unblinkingly obvious: demographic changes will produce an American school system populated by minorities but a teaching core populated by persons who are not minorities. The percentage of black teachers, for example, declined from 12 percent of the teaching force in 1970, to about 5 percent in 1990. There are many reasons for this reduction, but most obvious is the increased opportunities available to qualified blacks and other minorities in occupations other than education.

The schools will need more teachers: nearly a million will retire in the next decade. Short of dramatic intervention the new teachers will not be recruited from the nation's minority groups. This means that important role models for the minority students will be scarce and that all students will be denied the diverse education experiences sought for a pluralistic society.

One strategy for addressing this problem is to begin to attract minority teachers from among able high school students and to provide them with an early opportunity to consider teaching as their profession. Recruitment is an important aspect of the Coolidge High School for the Teaching Professions. Other pieces of this unique intervention include emphasis on the history of the teaching profession, development of strong academic skills, and many enrichment experiences provided by community support groups.

Program features

The Teaching Professions program is a four-year college preparatory program for students interested in careers in education. From the outset (the program began in September, 1988), students have engaged both a demanding course of traditional subjects and an es-

pecially designed curriculum related to the teaching professions. Among the courses of study developed for the program to introduce students to education as a vital and challenging profession are: "Orientation to the Teaching Profession," and "Issues In Education." In the initial orientation course, students work with teachers in child development centers as tutors, story-tellers, and supervisors.

Courses were also developed to focus on the life skills essential to help young men and women plan their futures and to introduce them to a broader view of human potential, such as: "Arts and Cultures," and "Preparation and Planning." Perhaps the most distinctive curricular component is "Preparation and Planning." Perhaps the most distinctive curricular component is "Professional Practicum" in the senior year which provides some experiences in actual teaching.

Development and intellectual history

The Teaching Professions Program draws most immediately on the positive experiences of magnet schools and, ultimately, on theories of experience and learning proposed by John Dewey. The students select the program and subsequently are provided with experiences that challenge them intellectually and which are clearly important in the world of work. They are provided with an identity and group esprit, and provided standards of excellence, too often lacking in urban high schools.

The development of the Coolidge High School for the Teaching Professions came as a result of an ad hoc task force for future teachers which was appointed by Superintendent Floretta McKenzie. Based on the report, Dr. McKenzie proposed that a career-focused program for the teaching professions be initiated. Additional investigation of the idea was undertaken for two years (between 1986–1988). Consultants from the Austin High School for the Teaching Profession (Texas), which has begun in 1983 assisted in the planning and development process.

Fifteen thousand dollars in seed money for the project was made available by a local foundation, The Eugene and Agnes Meyer Foundation. Other development costs were provided by the Superintendent's Office. Currently, the program is supported through ESEA Chapter Two funds.

In addition to federal and private funds, the program has been the beneficiary of two outside groups. The program was adopted by the Howard University Branch of Howard University in 1989. The fraternity has provided support in setting up libraries, providing consulting services, locating scholarship opportunities, and engaging in fund raising activities. A second group which has provided management support for the program has been a Business Advisory Committee. In addition to support from public spirited businesses such as the telephone company, the membership also includes professional associations located in Washington, DC, such as the National Education Association and the American Association of Colleges for Teacher Education.

Evidence of success

In 1988 the program enrolled 31 students; in the 1990-1991 school year it has grown to 150 students. Anecdotal evidence from student reports indicates that they have increased their appreciation of teaching and helping, and of the teaching profession and the self-confidence in themselves as a result of the program.

Visitors to the program, including Congressional staff, have reported on its apparent impact on the high school students. They report that students are enthusiastic, dedicated, motivated—not terms customarily applied to high school students.

Finally, the program has shed its "pilot" label and become an integral part of the school system. The program continued its steady growth through a change in Superintendents and has the full endorsement of by Dr. Andrew Jenkins, the current Superintendent.

Recommendations

The Coolidge High School for the Teaching Professions is supported by federal funding, supplemented by private contributions. One recommendation to the Congress clearly is that continued support for education is essential if such programs are to be made available.

While this program may provide a model to be emulated elsewhere, it is clearly not sufficient in itself to meet the problem of recruiting many more minority teachers. The federal and state governments need to address this problem head on. Senate bill 1675, introduced by Senator Kennedy, provides provisions that address this problem in terms of the Coolidge program: one provision of this Bill would encourage magnet schools to be formed around themes such as teaching.

The Department of Education must provide leadership in helping policy makers and business leaders create new vehicles addressing the problem of recruiting minority teachers in a variety of creative ways. The Coolidge program offers an example of one effort that appears to be work, but much more is required.

For additional information

For additional information please call or write: Jennifer Gibbs, Principal, or Christine Easterling, Program Coordinator; Coolidge High School for the Teaching Professions; 5th and Tuckerman Streets, NW; Washington, DC 20011; 202 722-1656 or 202 576-6144.

Oyster Elementary School, Washington, DC

Problem addressed

In general, Americans do not learn foreign languages, but expect others to speak English. The languages of children coming from other cultures are rarely respected. The children are urged to forget their native languages and learn English as quickly as possible. Because of this prejudice against languages, Americans are shortchanging their children in two ways: they are not learning a second language, and they are also not developing the higher-order thinking skills associated with language acquisition.

Program features

Oyster Elementary School in Washington DC operates a two-way bilingual program for grades K–6. It is a public school which attracts a wide spectrum of students from all socioeconomic groups, as well as students who have recently arrived in this country. More than 65% of the students enter the school speaking another language than English.

By the sixth grade, the school aims to have all students attain equal proficiency in Spanish and English and an understanding of the multiplicity of the world's cultures. To achieve this, the school provides two full-time teachers for each classroom, one a native English and one a native Spanish speaker. Each language is taught as a subject, and is also used as the medium for instruction in the usual elementary school subjects. Half the day's classes are taught in English, the other half in Spanish. Other divisions are also used: some semesters everything is taught in Spanish and the next semester everything in English; or some classes will be taught in English for one day and then in Spanish the next.

Students begin the study of both languages in prekindergarten, and can read both Spanish and English by the time they are in first grade. Most are fully bilingual by third grade, and can read material in English during classes taught in Spanish, and vice versa.

Intellectual history

A strong basis of research in language acquisition underlies the Oyster School's two-way bilingual program. This research shows that second languages are acquired naturally when they are used for the everyday business of life. Kenji Hakuta in *The Mirror of Language* reports research demonstrating that bilingualism enriches and enhances a child's mental development. The Oyster School's program is the object of research undertaken by the Center for Applied Linguistics in Washington, DC.

Models of two-way bilingual programs (also called "dual language immersion) are operating in schools in California, Virginia, and New York.

Evidence of success

Although half of Oyster's 350 students qualify for free or reduced-price lunches, and about 60% are Hispanic who arrived speaking only Spanish, their test scores are high. Third-graders attained scores just below those expected of fifth-graders; in English usage and mathematics, they scored at sixth-grade level. Students in the sixth grade made reading scores expected of eighth-graders, and their mathematics and English usage scores were equivalent to those expected of tenth-graders. These results are confirmed in published research studies. A team of students from Oyster won the regional competition for their age group in the annual Odyssey of the Mind competition.

Both children and parents express satisfaction with the school and the Hispanic community, which has fought long and hard for a Spanish-English bilingual school, is proud of the school and its success.

Lessons learned and recommendations

There are six critical components for the success of two-way bilingual school programs:

(1) there must be an appropriate social context for the program, preferably with a mixed population;

(2) the language proficiency of the students needs to be the focus of the program;

(3) the support of parents is essential;

(4) the goals of the program must be spelled out clearly and understood by all parties;

(5) the teachers must have a high degree of language sensitivity and cultural awareness;

(6) the curriculum must be carefully designed to teach both languages.

In addition, there should be federal and state funds to increase the numbers of two-way bilingual school programs, since they are addressing a critical need.

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Wells Junior High School, Wells-Ogunquit Community School District, Wells, ME

A School Site in the National Education Association's Mastery In Learning Project

How does a school engage in restructuring so that:

- *All* faculty are committed to and involved in the restructuring effort;
- Change and growth is ongoing, long lasting, and appropriate to the individual school;
- A decision making process evolves that allows those who must implement changes to make the decisions regarding those changes;
- Dialogue concerning teaching, learning, curriculum and instruction is informed by research and encourages reflection on practice;
- Adequate support systems are available to provide necessary financial, human, and professional resources;
- Limited time is used effectively, given that school is in session every day and restructuring is inhibited by this reality; and
- Improved student learning, the ability to respond to a changing world effectively and creatively, and the living of meaningful lives for all members of the school community is the goal of growth and change that comes through the restructuring effort?

When any of the above factors is ignored, long lasting, significant change cannot occur, as it is doubtful that a strong foundation will exist to sustain such an effort. Building a strong foundation for restructuring takes time, money, and support, none of which is abundant in schools.

Program features and evidence of success of promise

If the success or promise of our efforts the past four years at Wells Junior High School had to be formulated into one sentence, it would be the following: The Mastery In Learning Project has provided us with a groundwork that honors the thinking of all individuals involved in the school community; and, therefore, allows us the promise of educating children who can effectively deal with a rapidly changing world in a way that is intelligent, humane, and creative.

What is the evidence of this promise? Growing up in American society, we know we are supposed to point to a lot of tangibles, (higher test scores, a greater number of awards, greater community satisfaction, [illegible]ater student opportunities) and we can do this for those who want the tangibles. Our state scores have gone up, we, as teachers, are providing more types of learning experiences for our students in a variety of ways, students are becoming more in-

vested in the time that they spend at school, parents are becoming increasingly less antagonistic or apathetic and increasingly more involved with what is happening in their children's education, and we have received $50,000 from a private foundation to continue our work. School Committee—Teacher Union issues are in an increasingly collaborative mode than a confrontational one, and so on.

We would, however, if we stuck to these tangibles, be selling short what we have done in our school. We have established a system whereby everybody's thoughts, opinions, experiences, and knowledge is listened to, so that we, as a whole community, respond together. We work on solutions that are acceptable to all and strive so that no individual loses. We do not negate, as in a top-down mandate or a majority vote, nor do we compromise. Does such a process take time? Yes! An enormous amount, and again, reflecting on American society, we want positive change to be immediately visible. But, our educational history has proven countless times, that surface innovations come and go. What may be hailed as the sure-fire solution to a particular educational problem today had its own variant ten or twenty years ago. We have to be working on how we operate, not instituting the latest innovation. That is the promise we have at Wells Junior High.

Through concentrating on how we work together, w. have adopted a philosophy that change is not an event with a finish line, but is ongoing and evolutionary. We know we must discuss, reflect, examine, evaluate, create, and recreate continuously. Some of our present practices, or program features are:

The Mastery In Learning Project (MILP) and Wells Junior High proved to be a good partnership. The MILP does not have an agenda for restructuring, but gives personalized support, a few guidelines, and access to useful resources. It is up to each individual school in the network to think and act for itself. The guidelines are commitment to shared decision making, enabling teacher leadership, the active use of research, and the hiring of a change facilitator, all of which proved valuable to the school. MILP links all the project schools through national conferences and the PSInet computer network, forming an even larger family of educators. With this level of support, restructuring became possible, challenging, and finally probable in Wells. MILP consistently demonstrates confidence in the ability of local school faculties to know what they need. It never offers mandates, or predesigned agendas for restructuring, which is an important lesson for those who wish to support restructuring of schools.

The PSInet Computer Network, developed by the MILP and IBM, links Wells Junior High with other schools nationwide, plus universities and educational R & D laboratories, for a total of 87 users. The network is part of a federally-funded effort to link researchers with practitioners. As teachers begin to contribute to and learn from this network, reflection on practice and the active use of research expands.

The development of a strong, knowledgeable, adult community has been the primary focus for the last three years. It felt sensible to learn to understand, appreciate and listen to one another before trying to change a school. From there would come a role model for students, and a conceptual base for future changes. This proved to

be the right place for us to start. The end result is that all the adults in the school are committed to change and growth, at varying levels, but with trust in one another and faith that the community they have built will sustain them in their efforts.

Shared decision making is a common phrase in restructuring jargon, but it is rarely as far reaching as in this school. Here, most decisions are made by the whole community, by *consensus.* Health and safety rules, school board policy, state and federal laws are the only issues that are not open to discussion and/or decision making. Some decisions are sensibly the work of administration, but input and questioning are expected practices. Decision making forums are led by a volunteer facilitation team made up of teachers, support staff, and administration.

Teacher leadership has blossomed. Leadership is voluntary, and nearly universal, attesting to the success of a focus on adult community building. Teachers' leadership accounts for the success of teaming, the MILP Steering Committee which coordinates the Project and professional development, the ad hoc committees which form the heart of issue research and proposal development for decision making. A Transition Team provides guidance for the change from a Junior High to a Middle School. A Coordination Team works with the University of Southern Maine on a new, on-site, collaborative teacher training program. This faculty was no different from any other at the start of this project: a few people took on the majority of the leadership roles. It is a very different picture now. Leadership opportunities abound. Leaders are everywhere.

Teacher Control of Professional Development is a district policy. With quality time at such a premium, in-service days are precious. Some days are used for district-wide needs, but most are used to continue work on restructuring. It is here that community building skills are developed, critical issues of learning and teaching are discussed, and long range plans are developed. Individual teachers are supported in their choices for personal professional development as well.

District support is strong and consistent. The people in the central office and on the school committee believe that real change takes real time, and have allowed that time, while encouraging the risk taking necessary to make significant change. The chances are very good that this school will not look like other schools in five or ten years, because the district leadership is not looking for quick fix changes, but understands the ongoing nature of true restructuring.

The Smart Family Foundation took an interest in this project and has given the financial support that made a critical difference. Time and money are two of the most frustrating parts of restructuring. All the energy, interest, and expertise there can be available, but without time and money, energy wanes, interest is consumed in other demanding endeavors and expertise gets wasted. Wells Junior High was fortunate—the Smart Family Foundation turned out to be much more than a source of financial support. Their interest in whether this kind of restructuring is workable, with no strings, no mandates, no expectations, has made the school and the foundation into partners in learning.

This grant made possible the hiring of a *long term change facilitator.* This position is one worth serious consideration by schools who really want to change. To have one person whose only concern is caretaking the change process makes a noticeable difference. In the case of Wells Junior High, the change facilitator provided support, information and/or training in areas from conflict resolution, consensus decision making, meeting design, change theory, and facilitation skills to cooperative learning, reflective practice, alternative instructional strategies, and problem solving techniques. In addition, she documented the project and provided appropriate research.

Changes for students are what really matter. After three years of developing a cohesive adult community, changes for students are beginning to happen, just as anticipated. These changes are happening because they make sense to THIS school, not because research says this or that is what the change should be. Teachers are prepared to question, to reflect, to use research sensibly and intelligently. They are capable of the kind of creative thinking that may result in a school that is the best place for students to learn and grow. It will happen in its own way, in its own time, because it has a process to sustain it, an adult community that knows and trusts one another, and a support network that gives it strength. While many changes for students have already occurred, they cannot be seen as fixed solutions, but as steps in a process. Some of them are:

- Equity of learning opportunities for all students has resulted in 75% of 7th and 8th graders taking a foreign language, by choice.
- Cooperative learning is widely practiced.
- Varied instructional strategies such as project, field studies, learning centers, and simulations are common.
- Interdisciplinary learning and theme weeks are increasing.
- A position called At-Risk teacher was created. He/she acts as champion for At-Risk students, working with teachers and students to develop creative programs to keep students interested in school.
- Several special programs to build self esteem, self-confidence and cooperation skills, including physical challenge activities akin to Outward Bound, have been developed.
- Exploration of alternatives scheduling patterns, including a modified block schedule is ongoing.
- The study of grouping patterns resulted in a move from homogeneous grouping to a mix of heterogeneous and homogeneous groups.
- Special Education students are integrated into regular classrooms.
- A creative program for integrating computer and other technology into the mainstream of school life is evolving.
- Adults from the local area come to school as guests and resources for the classroom, expanding the links between school and community.
- Increasing opportunities for student decision making is a present concern.

- An exploration of discipline philosophy as a reflection of the relationship between adults and students commonly engaged in learning and living together is underway.

The feel of excitement, change, commitment, and energy is in the air. We know we are headed in the right direction, but we do not know what the scenery along the way will look like, nor are we worrying about the destination—only the quality of the trip.

Restructuring schools is much like reconstructing an airplane while it is in flight, with the expectation that the reconstructed plane will look nothing like the original. No airline in its right mind would ever attempt such a feat, but schools much as Wells Junior High do this routinely, and sometimes succeed.

Intellectual history

The last two decades have seen an enormous number of programs, plans, and ideas to improve America's schools. In spite of these efforts, as John Goodlad points out, schools have changed little since the beginning of the century. One reason is that most of the efforts have been made without involving the very individuals most effected by change in schools: teachers. Without their support and active involvement, change efforts will continue to fail. The Mastery In Learning Project is built on two basic beliefs. First, every decision about teaching and learning which can be made by teachers should be made by them. Second, the knowledge base about teaching and learning should be used to inform decision making.

Tom Peters and Waterman, authors of *In Search of Excellence* believe that decisions in organizations would be made as close to the customer as possible. Major studies of innovations in schools during the 1970's, the DESSI Studies and the Rand Change Agent Study, identified the crucial need for a culture which supports change. Educational literature supports the following contentions. Teachers have traditionally been isolated in individual classrooms with little professional support or encouragement to improve, norms which allow them to ignore change efforts. Schools with cultures which encourage the discussion of professional issues, with a sense of trust which allows teachers to take risks and share concerns, are able to develop shared aims and implement desired changes. A problem-solving approach also contributes to successful change. When an innovation is selected on the basis of its ability to meet a perceived need, it is more likely to be adopted. Teachers are also best able to develop solutions to problems encountered in the implementation stage, because they know the students and the classroom situation.

As an individual school, we must create our own program of self-renewal, incorporating what is known about effective teaching from research and theory in the light or our own experience. We have not always been comfortable with using research, since studies frequently contradict each other and researchers often seem removed from the realities of our classrooms. In fact, we cannot use research prescriptively in quite the same way as medical research, because it does not provide a fixed set of rules for effective practice. We can use it to inform rather than to direct our practice. As pro-

fessionals aware of the continually developing knowledge base for teaching and learning, research helps us to examine our classroom experiences and make instructional decisions. By engaging in a dialogue with the research community through the PSInet Computer Network, we contribute to deeper understanding.

Our school is becoming a learning community which works together to make decisions informed by research. In staff and team meetings, we model the thinking skills which our students will require for success in the twenty-first century. Sometimes we must debate our differing beliefs about good teaching and the purpose of schooling. In doing this we expand our repertoire of knowledge and forge a common vision for the school. We know that a school based on using critical inquiry to make decisions engages in a continuous process of renewal and change: we are restructur*ing*, not restructur*ed*.

Lessons learned and recommendations

The Mastery In Learning Project at Wells Junior High School has produced the following findings and recommendations:

- "Top down" changes/reform initiatives are systematically resented and resisted by all but those at the very top.
- Outcomes (students being able to demonstrate directly what has been learned) should not be focused on paper and pencil standardized tests.
- Some educational research and development must be conducted in classrooms with teachers as the primary investigators.
- All Federal educational funds/support should be reviewed by a Commission that includes practitioners, parents, and students, with their charge being to reallocate existing Federal funds to support change in schooling.
- Teachers are exhausted attempting to change/restructure the way schools operate while they're open. Federal funds should be made available to those schools who voluntarily choose to restructure so that teachers involved in the process would spend 50 percent of their day with students and 50 percent of their day with adults.
- Congress must continue to sponsor national events to spotlight and celebrate the changes that are beginning to occur.
- A National Educational Change Foundation should be formed so that schools who require support for their change efforts may receive grants. This could fund extended school years for teachers, training, change facilitators for individual schools, mini-grants for teachers and students.

Additional information

The Mastery In Learning Project can be contacted by writing or calling:

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Wells Junior High School can be contacted by writing or calling:

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Little River Elementary School, Dade County Public Schools, Miami, FL

Little River Elementary is an inner-city school located in an area of Miami, known as Little Haiti, a neighborhood that has undergone dramatic changes since the 1950's. In the latter part of the 1950's, the neighborhood serviced by the staff at Little River was still predominately white and blue-collar. These demographics were soon to change between 1960-1980, as more low-income residents replaced the original inhabitants of the area. This process was further aided by the two successive waves of urban unrest, which occurred between the 1960's and mid-1980's. The turning point for the area, however, was an influx of Haitian immigrants who presently comprise the majority of students serviced by the school, which began in the latter 1970's and continues today.

As the complexity of the Little River (Miami) community slowly changed, so did the socioeconomic norms. The Little River area soon was viewed as a high crime district, suffering from the many ravages of drug abuse, dilapidated public housing, prostitution, teenage pregnancy, a high rate of homicide and a high drop-out rate, thus further perpetuating the cycle of poverty many residents had sought to escape.

By the early 1980's, Little River Elementary was a school at risk. During this period of time, Operation Turnaround (a program established at the district level to combat the many woes of Little River Elementary and several other inner-city schools), attempted to address low student and teacher morale, the high degree of student and teacher absenteeism, student and teacher transience, the lack of parental involvement, and low academic achievement and test scores. The impact of the Operation Turnaround program, which was a top-down policy approach to a situation endemic to many large urban centers, was minimal. Although Operation Turnaround provided resources and materials that were desperately needed within the schools which participated in the program, it failed to be effective (never once were the suggestions of staff at the school sites elicited) and was subsequently discontinued.

At about the same time that Operation Turnaround was being dismantled, the Dade County Public Schools and the United Teachers of Dade were embarking on an ambitious experiment with School Restructuring and the Professionalization of Teaching. Through a joint resolution on the part of DCPS and UTD, Requests For Proposals (RFPs) were sent out to all schools in the county, which sought schools willing to submit to the formidable task of restructuring their school site (this required the willingness and commitment on the part of two-thirds of the faculty, as well as the cooperation of school-site administration and the local community).

Little River Elementary was an inner-city school in need of restructuring, and the problems innate to an urban setting contribut-

ed to high teacher and student absenteeism, massive yearly teacher turnovers, a dilapidated physical plant, low morale/self-esteem on the part of both teachers and students alike, and ultimately poor test scores. The school was built in the 1920's to house approximately 730 adults and children. At present, there is a staff of 206 who service a student population of 1600 (grades K–5), with over 85% of those students eligible for free breakfast or lunch. Additionally, the Little River Elementary student population is comprised predominately of newly arrived Haitian children, many of whom often never had any formal educational experience and have to overcome significant language barriers (Creole was not even recognized as a legitimate language by its own government, so it did not become a written language until recent years). Little River's problems could not be solved with the limited funds available through traditional methods of school operation or traditionally top-down mandated programs emanating from the district or state level. Upon the demise of Operation Turnaround, however, the administration of Little River did not even apprise their staff of the district's RFP initiatives. The lack of a response from Little River to the RFP did not, however, go unnoticed.

The fact that Little River did not respond to the RFP became the topic of a scathing article which quoted then interim Superintendent of Schools (soon to become Dade County's Superintendent of Schools), that Little River Elementary School was to be the subject of an overall restructuring plan, including "The removal of everything in the building, except the children and the furniture." However, rather than bow down to the pressures from outside the school building, the staff, with the support of the community, seized upon the opportunity to make positive suggestions.

Program features

Due to poverty, cultural, and linguistic differences, most of the students attending Little River Elementary School are educationally disadvantaged. Therefore, it was our intent to accelerate the learning process of our students through school-wide reorganization involving enhancement of the quality of instructional services, encouragement of greater parental involvement and the improvement of the morale of students and staff through participation in School Based Management/Shared Decision Making (SBM/SDM). Every effort was made to include the total staff's involvement and consent while formulating the SDM model and subsequent SBM proposals.

First, the kindergarten program was totally revamped at the request of the kindergarten teachers, to provide an early intervention program. A traditional kindergarten program was replaced with a three-tier structure:

Junior Kindergarten was instituted to provide a stop gap and safety net for the myriad of indigenous African-American, Native American, and Haitian (and more recently Nicaraguan) students, who come to L.R.E. wholly unprepared for the rigors of a structured educational program. Their parents are included in the educational program. Their parents are included in the educational process prior to the opening of school, so that they are prepared for, and involved in, their children's experiences. Junior kinderga:-

teners receive no grades, use manipulatives extensively, and move into regular kindergarten when they are ready (at the discretion of a team of kindergarten teachers), even if it's in the middle of the school year.

Regular Kindergarten begins a more traditionally structured program, where books begin to replace manipulatives and grades are given. If the curriculum is not challenging enough for the student here, he/she is placed in Senior Kindergarten.

Senior Kindergarten strives to provide enrichment activities to those children who have been fortunate enough to have had more life experiences than the average child. Students can, and are, moved between the three tiers when the staff finds it appropriate, based on the individual progress of each child.

The second School Based Management Proposal initiated by the staff as an essential and complementary part of their restructuring efforts was:

The Parent Education Center. This unique program provides an opportunity for parents from the surrounding community to utilize the school facilities (i.e., the comfort and safety of the school building, materials and support personnel) to learn homework assistance and parenting skills after the regular school day and on the weekends. Parents are given materials and instruction by teachers who volunteer their time (as well as one paid staff member who oversees the program), with emphasis on home activities to compliment what is happening at school, how to help children with homework, how to read to a child and have a child read to an adult, as well as, the construction of parent-made games to take home and use with children. The program has been a huge success and the recipient of two grants.

The third and fourth initiatives involved the development of two child-centered laboratories:

A Computer Lab Prior to SBM/SDM L.R.E. had a computer lab which serviced only the needs of those students designated as Chapter 1, thus, penalizing the non-Chapter 1 students, because federal guidelines prevented the latter students from utilizing Chapter 1 funded equipment. Hence, under the initial SDM/SBM proposal, a computer lab was established to meet the needs of both the non-Chapter 1 and Compensatory Education students (the latter are former Chapter 1 students no longer eligible for Chapter 1 funds because of their grade level, ie: 5th grade), regarding the acquisition of computer literacy and application skills.

However, as a result of L.R.E.'s becoming a school-wide Chapter 1 Pilot, the Computer Lab, which once only serviced Chapter 1 students, is now equipped to service the entire student population, K–5. A full-time computer teacher was hired and the former non-Chapter 1 computer lab was expanded to include the Chapter 1 computers. There are presently 39 Apple II series computers with an array of software to compliment instruction which takes place in the homeroom classes. Articulation between the homeroom teacher and the Computer teacher is essential. All teachers are inserviced in computer literacy skills and what is expected of each child who uses the lab. Remedial and instructional software are used, as well as, instruction in word processing, desk top publishing, critical thinking skills and computer programming.

A Science Lab. The Science Lab enhances classroom instruction by providing hands-on experiments, manipulatives and in-depth exploration of scientific materials, equipment, and techniques. A full-time science teacher was to hired service the entire school population augmenting the efforts of the classroom teacher. With the advent of the school-wide Chapter 1 Pilot another science teacher was hired. Articulation, again, is crucial between both teachers involved.

The fifth proposal tackled by the staff was the establishment of: *Integrated Curriculum.* Of all of the programs initiated, this one required the most time and energy, as it involved staff development and a totally restructured approach to curriculum. Whole language has proven to be very successful for our students with limited experiences, those learning a new language and students who need to be challenged, because children are able to move at their own individual pace more easily.

Finally, a school-wide Chapter 1 Program was implemented, making Little River Elementary Dade County's largest school-wide Chapter 1 Pilot Project. The major components included several researched-based curriculum strategies which included: Team Teaching, Cooperative Learning, Integrated Language Arts, Peer Tutoring, and expanded Library Program. Additionally, Math and Reading Resource Teachers were hired to provide the teachers with in-house staff development programs and support. Furtherstill, several members of the community were hired to function as members of L.R.E.'s Parent Outreach Program, which was designed to provide each grade level a liaison with whom prompt and direct communication links could be established with parents whenever the need arises. The members of the greater community were invited to become involved in the restructuring of L.R.E., and they showed their overwhelming support through programs such as Dade Partners, Adopt-A-Class, and a partnership with H.R.S., Student-oriented incentives included the Principal's Honor Roll, the end of the year Principal's Field Trip, Student of the Week Program, the 100% Club and attendance and effort recognition assemblies.

The impact that the aforementioned programs and curriculum changes had on the overall academic program of Little River Elementary was tremendous. Where the school was once ranked 165 out of 172 elementary schools in Dade in student attendance, L.R.E. has risen to the ranks of the top 30 elementary schools with an average daily student attendance of 95.5% of the students attending school. Where teacher absenteeism was a severe problem (with a near daily average of 7–15 teachers absent), there is hardly ever an absent teacher, unless he or she is attending a workshop or receiving inservicing. The students of L.R.E. have gone on to win the top awards in: a) Theodore R. Gibson Oratorical/Essay Project—1st place in 1988 and 1989 (3rd, 4th and 5th grades; b) Chapter 1, North Central Area Oratorical Contests—3rd place (1987), 1st and 2nd (1988 and 1989); c) Inner-city mathematics Competition—1st and 2nd place in 1989 (which L.R.E. had previously not competed in for nearly four years), as well as, d) an Attendance commendation from Dade County Public School Board Members and School Administration. Additionally, after only one and a half years of L.R.E.'s participation in the restructuring movement of

DCPS, the staff and administration received the prestigious Augustus G. Hawkins Award for Outstanding Achievement in Educating Black and Minority Children in 1989.

Little River Elementary is still in the midst of restructuring, and we are still evolving, because we have come to the realization that "Restructuring is a process. . . . not an end!" For only through the collective efforts of teachers, paraprofessionals and related support staff, students, parents, community members, school administrators, school board members, unions and the continued support of government officials, can America's public educational system be restructured to meet the needs of all children and prepare this country for the challenges of a global society.

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National Urban Alliance for Effective Education [NUA]—Headquarters: New York, NY

Introduction

Our technological age and complex society demand higher levels of literacy for more students than ever before. To that end, the National Urban Alliance for Effective Education strives to improve instructional practices that lead to students' greater cognition and comprehension, improve teachers' ability to develop and deliver these instructional practices. The role the NUA plays to bring this about is as a facilitator of school, university, business and community collaboration to improve teaching practices, and thus, student learning.

The need for greater student learning is nowhere more critical than in the nation's urban schools. Urban students and teachers are now at risk of being locked out of the vision of schooling that promotes lifelong learning, independent thinking, critical decision-making and creative problem-solving. The NUA is one effort to enlarge the opportunities for urban students to benefit from the growing body of international research that demonstrates that *all* children can become more effective thinkers. To do so requires instruction and sustained, careful attention from the entire school community.

The alliance

One key component of the NUA effort is an urban and metropolitan educators' network which shares research and identifies successful practices in teaching students how to think. Seven urban districts have formed a coalition to develop and share new, effective practices with which they are experimenting in their home districts. Their efforts are supported with research and evaluation by scholars at Brooklyn College, Columbia University Teachers' College, Harvard Graduate School of Education, Rutgers University, San Francisco State University, University of Missouri at Kansas City, University of Wisconsin at Madison, and Yeshiva University.

A second key component is the production of documentaries, teleconferences, training materials, and site-based staff development activities by Simon and Schuster's Division of Educational Training and Telecommunications, the College Board, the Public Broadcasting Service, and KCET-TV Los Angeles. For example, a training tape series entitled, "Reading, Thinking, and Concept Development" (from an instructional model created by the College Board) has recently been completed. A MacArthur Foundation-supported documentary filmed in NUA school districts, "A Cry from the Edge" is also available. The film portrays schools working successfully with minority students who are potential dropouts.

A third key component is the involvement of parents and other community members.

Research and theory supporting the NUA

The NUA's overall approach to improving student outcomes rests heavily on the body of theory and research defining effective schools for urban and minority students; identifying successful instructional practices in teaching children how to think and learn; and recognizing the potential of technology, particularly telecommunications, in developing staff capacity.

The effective schools research emphasizes the need for high expectations, instructional leadership, and appropriate assessment to ensure children's success as thoughtful lifelong learners. The Reading, Thinking, and Concept Development model created by the College Board is a strategic curricular, instructional, and assessment approach to education. The aim of this approach is to move beyond mastery of basic skills to ensure all students have the capacity to know, think, weigh alternatives and decide, as central parts of cognition and comprehension. The NUA goal is to redefine basic skills to include comprehension, critical thinking, problem-solving, and related aspects of higher order cognitive processing.

The overall thrust of these advances must be modified to fit the specific staffing, cultural, and material needs of a given district. There is enough commonality, however, to enable several school districts to benefit from the general directions drawn from the research. Recent technological advances such as satellite telecommunications, interactive video, teleconferencing make it possible for far-flung school districts to gain access to a wide variety of information, techniques, strategic models, and training opportunities from a single source. Instead of each district or state member of the NUA developing its own staff development materials, duplicating their efforts unnecessarily, the NUA has exploited available technology to ensure its members are on top of the latest research and practices which can then be tailored to individual district, school, or classroom needs.

The NUA's potential for success

The promise of the National Urban Alliance is clear from its groundbreaking effort to bring to urban schools the highest quality instructional strategies. A better indicator of promise is how an individual district is responding to the challenge set by NUA.

A local alliance for effective education

The Milwaukee Public Schools headed by Dr. Robert Peterkin, Superintendent and founding co-chair of NUA, is one local model. "Cognition and Comprehension: Learning How to Learn" is a project focusing on the teaching of thoughtful communication staff development, meaningful parent participation, and networking among educators. The challenge of the project is to expand students' horizons by teaching them *how* to learn rather than constricting their possibilities by merely teaching facts. The project will ultimately involve six sets (Service Delivery Areas—SDAs) of middle and high schools and their feeder elementary schools. Ad-

minist: ›tive, instructional, and support staff, along with parents and a p. ›ject director make up the Milwaukee Urban Alliance.

During the 1989-90 school year the MUA project was limited to schools in the lowest quartile of achievement scores, such that one high school, three middle and six elementary schools for a total of seven schools-participated in 1989-90. Teachers at the elementary and middle schools were invited to participate and all the ninth grade teachers were included.

The staff development plan for the Cognition and Comprehension project includes:

—workshops to create a knowledge and skills base, based on research and practice;
—demonstrations of good practice;
—observation of good practice via teleconferencing and face-to-face contact;
—instruction and experience in peer coaching;
—development of networking technique; and
—annual refreshers.

As the project expands, MUA teachers will take on training their peers. Experts from the local and state education agencies, as well as university and colleges from the surrounding areas, will be called upon. The project schools will eventually become teaching center/demonstration sites. Teachers will be able to take month-long sabbaticals at the demonstration sites to observe, practice, evaluate, and implement new practice. A special cadre of substitute teachers will be developed to ensure no interruptions in the students' learning. The teaching centers will also be models of parent and community involvement in education.

One key aspect of the MUA project is developing authentic measures of assessment of student performance. The sites will begin to move away from paper and pencil tests to performance-based exhibitions, work portfolios, oral exams, and essays. These new assessment methods will require students to formulate questions, investigate evidence, analyze data and discuss results—demonstrating how they acquire knowledge and use it.

Careful evaluation at the national and local levels of the Alliance will afford the education community and the public the chance to judge the impact of the changes in school structure, staff training, parent involvement, and teaching methods and curriculum on the learning of urban students.

Reinforcing the alliance

National and state level efforts supporting school restructuring, improved teacher training, teaching thinking skills, and performance-based assessment will help the goals of the National Urban Alliance. Federal research can assess local development of alternative assessment measures and improved teaching practices. The creation and validation of these tools is time-consuming and costly. Local experimentation would go further with reinforcement from federal research sources. The various research centers and laboratories funded by federal dollars could also contribute to identifying, testing, and evaluating new teaching methods which have as a outcome improved learning for urban and minority students. Specific

federal innovation grants should support similar activities in districts across the country.

State governments must allow the necessary waivers and provide supplementary funds to schools and districts to enable teachers to take the time to teach in more effective ways and to learn more effective ways to teach. State-supported staff development and technical assistance should reinforce the efforts of National Urban Alliance districts' goals.

For further information regarding National Urban Alliance for Effective Education call or write: Ramon C. Cortines, Superintendent, San Francisco Unified School District, 135 Van Ness Avenue, San Francisco, CA 94102, (415) 241-6121.

Robert S. Peterkin, Superintendent, Milwaukee Public Schools, 5225 W. Vliet Street, Milwaukee, WI 53208, (414) 475-8001.

Eric J. Cooper, Vice President, Inservice Training & Telecommunications, 15 Columbus Circle, 26th Floor, New York, NY 10023-7780, (212) 373-7990.

Capistrano Elementary School, Ysleta School District, El Paso, TX

Project CARE
Ysleta Independent School District
El Paso, Texas

Project CARE is a dropout prevention program to assist elementary school students in the border town of El Paso, Texas. El Paso is served by two independent school districts. Although the Ysleta ISD student population is only slightly less than that of El Paso ISD, its tax base is dramatically smaller ($3.738 billion vs. $6.865 billion). The three elementary schools served by Project CARE are 90 percent Hispanic, many of whose parents are immigrants, and almost 60 percent of the students participate in the free and reduced lunch program. The dropout rate ranges between 25 percent and 28 percent.

Project CARE was developed by teachers; their direct participation in the decision-making process is a major contributor to its success. The Project, established during the 1988-89 school year at Capistrano Elementary School, identified sixth grade students at risk of dropping out of school. The following year Project CARE expanded to two other elementary schools in the area, and changed its focus to fourth graders with similar characteristics. Major components of the project are a multi-faceted parental involvement program, community and business involvement and mentorship, and teacher support and training. A strong cultural program also contributes to the success of the program.

Parental involvement

Home-Based Visitation Program: Project funds pay for substitutes to release teachers so they may visit homes of those students who demonstrate poor academic achievement and are identified as at risk of dropping out of school during the school day. Teachers gain insights about the effects of inadequate funds for school supplies, poor nutrition, arduous living conditions, limited exposure to the English language, etc. that help them work with the students. Parents begin to develop trust in schools and to learn basic ways in which they can assist their children. They are encouraged to participate in the school-based parental involvement programs.

Parent Council: Meets every Monday to enhance parent awareness of school events.

Family of the Month: Named by the school, families receive a color portrait which is first displayed at the school. The family also receives a $25 gift certificate for dinner at the nearby Tigua Indian Reservation.

Community and business involvement

Mentorship: At present each of forty-two individuals from the El Paso business and professional community serve as mentors to two fourth grade students. Each mentor's employer allows the mentor to attend mentoring functions on company time. Mentors host a monthly field trip to a work site where students are exposed to a variety of professions. Frequency and consistency of contact between the mentors and their two "adopted" students often is rewarding to student and mentor alike. Many of the mentors came from similar backgrounds.

Foster Grandparent Program: Volunteer grandparents work with students with special emotional needs in grades one and two.

Literacy Skills in the Home: The El Paso Community College offers a course for teacher, parent, and student focusing on literacy behavior skills in the home. Thirty-five families were scheduled for enrollment in the course.

Teacher training and support

Special Retreat: Teachers meet for specialized training at a retreat at a nearby resort. This training emphasizes self-awareness and reflection and establishes a sense of camaraderie and teamwork. The El Paso Community College trains teachers to work with parents to strengthen literacy skills.

Training for Home Visitations: Provided by a consultant, Jorge DesCamps, from the University of El Paso.

Cultural validation

A Folklorico group has been established and meets twice a week. The Ysleta Independent School District has given technical and logistical support to the program by revamping schedules and providing funds for teacher release time and travel for activities associated with the program. The school district supports the program by granting first half time and now full-time release to one of its initiator, Gloria Barragan, a classroom teacher. Director Barragan has secured funding from the business sector which allows for flexibility, not always possible in district or federally funded programs. The initial grant was for $15,000 from Sears, Roebuck Foundation. The Ysleta Teachers Association sponsored a grant application of $33,700 to the National Education Association which was funded.

Much of the sociology of education literature identified as "resistance theory" focuses on the difficulties children from low-income homes encounter as they enter school and calls for "de-institutionalizing educational inequity" (Fine, 1988: 92).

Education That Works (Quality Education for Minorities Project, 1990) emphasizes a different factor affecting school success: minority status. Both sets of literature cite the organization and management of schools, rather than qualities of the students themselves, as the source of failure. The "resistance" school of thought examines ways in which poor and minority students are unconsciously discouraged by classroom practices, while the QEM report identifies certain school environments as hostile and damaging to minority students.

Evidence of success

Because formal evaluation was not part of the original grant proposal, the Ysleta ISD has no formal research in support of Project CARE, although anecdotal evidence abounds and several ideas are being considered to measure participation and assessment by parents, teachers, and mentors. Real gains have been apparent to all participants and visible to visitors and outside observers at the three campuses. Students carry themselves with a new sense of pride, confidence, and enthusiasm. They are anxious to introduce their mentors to parents, teachers, and classmates and they demonstrate social graces they did not have before the program. They are enthusiastic about various project activities, just as their parents are becoming eager participants in CARE workshops.

Lessons learned and recommendations:

Three lessons have been learned from CARE's two years of operation. First, because coordination of the mentor component is so complex, the director should be permitted to make a full-time commitment to the program. Second, mentors should contract to attend all scheduled meetings with students. Students depend heavily on these adults and are very disappointed when they do not participate. Therefore, mentor's employers must be equally committed to the program. Third, teacher input should constitute a vital element of the program. Because of their daily exposure to these students, they are more aware of problems. They are the link between home and school and must follow up on gains accomplished through the mentoring process.

For additional information, contact: Gloria Barragan, Project Director, Capistrano Elementary School, El Paso, Texas

Memphis City Schools, Memphis, TN: Memphis Education Association Learning Laboratory

Memphis City schools is the largest school system in the state of Tennessee and the eleventh largest in the nation, according to The Council of the Great City Schools. With an enrollment of over 106,000 students, the system operates 100 elementary schools; 23 junior high schools; 29 high schools; 7 vocational-technical centers; 2 special education centers; and an alternative high school. Students and parents may take advantage of 22 Optional Schools' Programs offering the variety of special studies in areas such as creative and performing arts, health sciences, engineering, college preparation, Montessori, and enriched academics.

Memphis City Schools is governed by a nine-member elected board—seven district representatives and 2 at-large members. The system is divided into five districts-two elementary, two secondary and one experimental deregulated district which serves as the Memphis/NEA Learning Laboratory. The school system employs over 11,000 people, making it the second largest employer in the city. The school system's budget for 1989-90 is $321,192,696.

Approximately 55,000 students, representing 53% of the total K–12 student enrollment, are eligible for free and reduced meals. These students, plus others who meet a sliding scale income criteria, are eligible to receive services provided by the Fund for Needy Children in the form of vouchers for eye glasses, clothing, and shoes. Funds from the Community Services Agency are utilized to pay rent and utilities for families in dire financial circumstances. Although official statistics are unavailable to the system, it is generally accepted that at least one-third of the students are AFDC and/or Medicaid recipients.

During the 1988–89 school year, 10,153 students received Board of Education suspensions for committing offenses that included insubordination, profanity, truancy, fighting, striking a teacher, destruction of public property, school vandalism, carrying or using a weapon and possessing and/or distributing a controlled substance. Suspensions involving violent offenses, firearms, assaults, and fighting increased 9.5% when compared to the 1987–88 school year. Additionally some 4,319 students were referred to Juvenile Court for a variety of offenses. During the school year 1988–89, 750 students were identified as having given live births and were offered Homebound Services to assist with their academic studies. Of the 750 mothers, 160 elected to attend the special school for pregnant girls .

Description of the problem

Similar to many other large, urban, predominantly poor and predominantly black school districts, the Memphis City Schools face a multitude of problems. These include poor academic achievement;

high absenteeism; high drop-out, suspension and teen pregnancy rates; unacceptable graduation rates; high retention rates; inadequate funding; lack of public support; a proliferation of students who use/abuse drugs; low employee morale; lack of parental involvement; and large numbers of students who are at-risk of failure in school and subsequently in life.

In an effort to address the myriad problems with which it was faced, the Memphis City Schools engaged in a number of system-wide and local school improvment plans. Standard curriculum guides were developed. Grade level and subject area performance standards were delineated. Graduation requirements were increased, the content of course offerings was strengthened and rigorous promotion and retention, homework, attendance and no pass no play policies were adopted. For the most part, these improvement mandates and dictates were top-down strategies that failed to take into consideration the relationships among the home, the school, the community, school personnel, parents, residents and students. Although modest progress has been made, the projected improvements and dramatic resolution of problems did not occur.

It became axiomatic that traditional programs and strategies for improving the system must address restructuring and involvement of individuals affected by or expected to carry out decisions in the decision-making process and the relaxing of policies, rules and regulations that govern local schools. Additionally, the Superintendent recognized that success of the plan would be dependent on the full cooperation, collaboration and support of the Memphis Education Association (MEA). The Association would have to be amenable to altering certain contractual provisions. More importantly, the MEA would have to be a full contributing partner to program planning, training, and implementation.

An addendum to the agreement between the Memphis City Schools and the Memphis Education Association was negotiated to protect the contract integrity and employee rights of personnel in the deregulated schools. The addendum to the contract also incorporates the agreements of both parties regarding the operation of the Deregulated School District.

Program components

After an exhaustive review of the literature, needs assessments and other documents and dialogue with key staff members, community leaders, parents, elected officials, teachers, administrators, students, colleagues and officials of the Memphis Education Association, the Superintendent of Schools, Dr. W.W. Herenton, concluded that bold, aggressive action is needed to avoid leaving an increasing segment of the youth of the city of Memphis intellectually and economically unempowered and therefore unprepared for the future.

Dr. Herenton further concluded that single focused, short-term, top-down programs and strategies were inadequate and did not yield long-term comprehensive results. Consequently, it was necessary for the system to establish a priority reform initiative for the next several years. At a minimum, the initiative had to address the following restructuring; school based decision making; deregula-

tion; teaching and learning; choices for parents and students; professionalism; early intervention; and parental involvement.

As reform planning proceeded, it became readily apparent that its primary goals were to:

- Effect a restructuring of the way schools were organized, staffed, managed, and financed;
- Implement a program which utilized shared decision making among principals, teachers, parents, and the community as a means of improving local schools; and
- Secure waivers from district and state bureaucratic regulations which impeded school improvement.

Specifically, the Memphis Plan for School Improvement, Teachers, Administrators, and Parents Together (TAAPT), is based on the premise that the governance structure of schools must be overhauled if meaningful school improvement is to occur. Similarly, the plan is based on the belief that basic educational policy should be shaped at the state and system level, but day-to-day decision-making must shift to the local school. Furthermore, principals, teachers, and parents must have increased authority at the local school level accompanied by increased accountability for results.

The Memphis Plan for School Improvement includes shared decision making; structural reform; and deregulation.

Shared Decision Making

Most public schools continue to use an industrial/business management model even though emerging research tends to support adoption of decentralization of power and authority and empowerment of individuals who carry out the decisions or who are most affected by them. According to Frank Newman, president of the Education Commission of the States, "The common wisdom today is that teachers need to be empowered, that they have an enormous ability to bring about changes if treated properly and that the teachers' union is an ally and a partner to that process." Others, including Carl L. Marburger, former Commissioner of Education for the State of New Jersey and long-time advocate of parental involvement in schools, maintain that school improvement efforts will not occur or last unless teachers and parents share the power and authority at the local school level. The committee for Economic Development, in the report *Investing in Our Children*, calls for ". . . nothing less than a revolution in the role of teachers and the management of schools."

Structural Reform

Ernest Boyer and John Goodlad cite the need for serious reconsideration of the ways in which schools are structured. Numerous studies have confirmed that there is nothing particularly sacred about the prevailing practice of organizing schools into rigid grade structures of K-6, 7-9, 10-12 or K-4, 5-8, and 9-12. Many authorities advocate redesigning those structures into smaller, more personal and less bureaucratic ones.

The schools involved in TAAPT have access to the most current literature and research findings concerning successful or promising structural reforms. The instructional staffs and local schoo' coun-

cils are encouraged to design, adopt or adapt structures that hold the most promise for meeting the needs of their students. Technical assistance and support in assessing the relative merits of new structures are available as well as assistance in developing and implementing any newly adopted structures. New structures may take the form of cross-grade or cross-age communities in elementary schools to multi-age teams in the higher grades. The structures may broaden the scope and function of the deregulated schools' educational mission to extend programs and services from preschool to senior citizens.

Roles and responsibilities of the teaching staff and administrative staff are investigated, as well as other differentiated staff assignments. Inasmuch as the school principal has the dual role of instructional leader and school manager, project schools will be encouraged to develop alternative means for executing these responsibilities. The key emphasis is on conscious and deliberate analyses of the facts and consensus formation about possible solutions.

Deregulation

As most educators will attest, schools are one of the most, if not the most, overly regulated institutions in our society. Frequently, the regulations, rules, policies and laws are contradictory, ambiguous, confusing and effectively inhibit schools from doing the things that need to be done in order to be successful with students. The Superintendent of the Memphis City Schools proposed that deregulated schools be exempt from the myriad of the prevailing federal, state and local rules, regulations, policies, standards and guidelines that restrict school programs and operations. In return for these exemptions, the schools participate in school-based decision making, assume greater responsibility for providing instructional leadership and supervision, and develop local programs and services for their clientele.

The Memphis plan

The Memphis Plan for the initial implementation of school-based decision making in conjunction with TAAPT is characterized by the following features:

- The closing of all participating schools prior to program implementation;
- The provision that all certificated staff members apply for each position ensuring a total staff dedicated to the goals of the program; and
- The staff selection process utilizing School Staff Selection Committee(s).

Initial Implementation

The Memphis Plan for school-based decision making was implemented in the spring of 1989 in seven schools: three elementary, two junior high, and two high schools. All schools were located in the inner city where there is a high density of poor, minority families. Each school was closed and all professional positions in schools were declared vacant. Position Announcements were posted system-wide. Qualified interested administrative and teaching personnel who applied to a deregulated school were subsequently

interviewed by Initial School Staff Selection Committees. These committees were composed of superintendent's designee; department of Curriculum & Instruction designee; Memphis Education Association President; Memphis Education Association Vice-President; Retired Memphis City Schools' teacher; two parents; and one community resident.

Each applicant was ranked independently by the members of the interview committee and the rankings were used as a basis to recommend local school personnel to the Superintendent for assignment to the deregulated schools. Principals were selected first and subsequently became members of the selection committees. Assistant principals were selected next, followed by grade/department chairpersons. The selection of teachers was assumed totally by the principal, assistant principal(s), parents, community residents and grade chairpersons/department heads of each deregulated school.

After school staffs were selected for each deregulated school, Local School Councils were elected. Each council includes the following: the principal, three teachers, two parents, one community resident and a nonvoting student member in each secondary school.

The council is the primary organizational vehicle through which the Memphis City School system shares decision making authority at the local school level.

- Responsibilities of the local school councils are listed below:
- Approve the schools' annual and/or multi-year plan of improvement;
- Interview and recommend to the superintendent of schools, assignment of the principal, assistant principal, teachers, and other school staff;
- Recommend the assignment of reassignment of the principal, assistant principal(s) teachers and other school staff based on approved criteria;
- Recommend the acquisition or establishment of local school programs, program goals, objectives, priorities, and activities;
- Participate in the development of and approve the local school's expenditure plan for all gifts received by the school, or funds allocated to the school by the school system, including funds for instructional supplies, materials and equipment and the library as well as those generated by local school fund raising;
- Advise and recommend to the principal programmatic and operational procedures on such matters as local school achievement, attendance, student rules, regulations and disciplinary matters,
- Recommend ways to improve school climate, communication and parental/community involvement;
- Recommend reallocation of resources that support and enhance the local school improvement plan;
- Conduct a meeting for the entire school community to provide input into the proposed local and school improvement plan;
- Assist in the development and presentation of the school improvement plan status reports;

- Convene at least two community meetings annually, during which time a report of the status of the school improvement plan will be presented;
- Participate in the periodic and annual review, assessment and evaluation of the local school improvement plan;
- Participate in the evaluation of the principal based on selected aspects of the school's performance appraisal plan and submit the results of same to the superintendent of schools;
- Recommend waivers from existing policies, rules, regulations, standards, procedures, practices and programmatic guidelines that impede the school's operations; and
- Participate in the training program for local school council members provided by the Memphis City Schools, MEA, or other agencies.

Program implementation in the 1989-90 school year has largely been devoted to the training of staff members and local school council members. Attention has been given to conducting needs assessments and the meaningful translation of these needs into school improvement plans.

Training

The Memphis City Schools and Memphis Education Association have provided training and technical assistance necessary to aid the locals school councils and teachers in the execution of their responsibilities.

Training to local school councils and teachers have included school-based decision making; team building; consensus/conflict resolution; problem solving techniques; communication; pertinent educational issues; needs assessment; brainstorming; school budgets; and school improvement planning.

Evaluation

Documentation and evaluation of the Deregulated Schools Program are conducted by The Center for Excellence in Education at Memphis State University.

For additional information about the Memphis Learning Laboratory, contact: Linelle Terrell, Project Coordinator, Memphis Education Association, 126 South Flicker Street, Memphis, TN 38104, Telephone—(901) 454-0966

Scott High School, Toledo, OH: Scott High Accelerated Program in Education (Project Shape)

Introduction

Few of the education reform reports, policies, or efforts during the past decade have turned sufficient attention to the democratic purpose of public education, or the plight of educationally disadvantaged students. Instead, much of school reform has pushed for more requirements, more testing, more homework, a longer school year, etc., without adequate analysis of the content of the education that is being expanded.

Only recently has there been a call for school reform that provides alternatives to the existing organization and structure of schooling; that includes teachers, and administrators to be educated to diagnose problems, analyze theory and research, and conceptualize solutions. This type of reform is likely to be better suited to drive policies that address the needs and interests of a democratic society and the underserved majority of educationally disadvantaged students.

A school reform effort of the later type has begun at Scott High School in Toledo, Ohio. As part of the Toledo Public Schools, Scott High shares many of the problems often identified in urban schools: high dropout and suspension rates, below average attendance rates, low academic achievement scores, and serious reading deficiencies. On the average, over 65 percent of Scott High School students fall below the 25th percentile compared to national averages in reading comprehension, mathematics, and written expression. They have higher absence rates that students in other Toledo public schools, a disproportionately higher rate of suspensions and explusions, eligibility for free lunch, poverty, single parent homes, and minority background.

The factors of poverty, inability of the teaching staffs to link classroom materials either within or across the curriculum, lack of comprehensive reading programs, insufficiently prepared classroom teachers to integrate reading and writing instruction into content areas, and poorly motivated students and teachers all contribute to Scott High School students' underachievement. Project SHAPE and its school restructuring complement, Professional Teaching, Accelerated Learning Model (PTAL) is a reform effort designed to counter this underachievement.

Project SHAPE and PTAL

Project SHAPE is a two-year intervention and enrichment program for underachieving and educationally disadvantaged freshman and sophomore students. The Project consists of a systematic program of teacher enhancement, curriculum development, and

student, parent, and community involvement. Project SHAPE's two primary goals are:

(1) develop an academically accelerated curriculum for educationally disadvantaged students; and

(2) transform instruction to link curriculum materials to the experiences that inner-city students bring to the classroom.

Teachers are empowered to develop curriculum materials and instructional strategies that enable students to move at an accelerated pace. This acceleration is intended to push students from their present level of achievement to one that will lead to greater success after high school.

All the Project SHAPE teachers participate in the PTAL program at the University of Toledo. There they learn how to integrate into their curriculum and instruction, research and theory in critical and reflective thinking, multicultural education, tracking and cooperative learning and other topics. Teachers are encouraged to combine this knowledge and experience with the strengths that students, parents, and the local community bring to the school.

Each ninth grade student enrolled in Project SHAPE is assigned a "pod" of no more than 100 students. Within this pod, students are divided into sections of no more than twenty-five students. The students are assigned at random, not on the basis of ability or prior achievement. These students remain together, with the same teachers, for math, science, social studies, and English during the two Project SHAPE years. One of the Project SHAPE teachers in each twenty-five student group serves as the group mentor, to assist with students' personal problems and to maintain contact with the students' families. The SHAPE academic program integrates reading and writing across the four content areas and focuses on curriculum and instruction that spans disciplinary boundaries. This is done by focusing on general themes such as environment and pollution, population, energy, and discrimination, and relating them to the knowledge and experiences students bring to the classroom. Each theme is structured to develop the skills of critical thinking through the process of observing, questioning, interpreting, and changing. Strategies such as cooperative learning and peer tutoring, tutorials, parent involvement, community projects are all used to improve academic achievement.

Theory and Research Supporting Project SHAPE

The theory and research which guide the Project SHAPE and PTAL programs are derived from Henry Levin's accelerated learning research which assumes that all students, regardless of social or economic background, can learn high content material, especially when it draws upon the intellectual and experiential strengths of the students and their community. The work of Theodore Sizer and the Coalition of Essential Schools undergirds SHAPE's strategy of cross-disciplinary instruction.

Stanley Aronowitz and Henry Giroux both promote the concepts of teachers as intellectuals who should be empowered to apply their critical thinking skills to curricular development and instructional approaches. They also argue for broadening the cultural context of education to include the culture and values of the community from which students come. This set of perspectives combines to

produce a school improvement/teacher training program that promotes teachers' ability to teach and *all* students' ability to learn at a high content level using higher cognitive skills.

Promising Evidence for Change

Even in the first few months of Project SHAPE, evaluators found that participating students missed fewer days and were suspended fewer times than similar non-participants. In a six-month period, SHAPE students improved in reading, language usage, math concepts, problem solving, and computation on a nationally normed achievement test.

In addition to student improvements, teachers have had the opportunity to expand their roles in the school. They have worked together to analyze the barriers to academic achievement for their students; examined educational research and theory for their relevance to the problems identified; developed research-based solutions; and implemented their ideas. These activities will ultimately lead to a conceptual model for urban educational reform which they can share throughout the district.

Project SHAPE is funded through grants from the Joyce Foundation, the Toledo Public Schools, and the University of Toledo with strong support by the Toledo Federation of Teachers and the Toledo Association of Administrative Personnel. The project also enjoys support from a local student advocacy organization, the Coalition for Quality Education which has reinforced the Project's aim of parent and community involvement. There is a push to expand the program to include more students and teachers and to keep the students in a similar program throughout their high school careers.

Such an expansion would require a significant infusion of funds from all existing sources, as well as additional ones. State and federal government support could enhance all aspects of the program including waivers of limiting state regulations, increased training and planning time for teachers, and additional resources for after-school, Saturday, and summer activities for students.

For additional information about Project SHAPE and PTAL, contact:

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SCHOOL MODELS IN "WHAT IS WORKING IN EDUCATION" SYMPOSIUM

Belridge School, Krista McAuliffe Institute, Star Rt. Box 900, McKittrick, CA 93251, (805) 762-7381.

Capristrano Elementary School.

Co[illegible]dge High School, Teaching Professionals Program, 5th & Tuckerman Sts., Washington, DC 20011, (202) 576-6145—722-1656.

Thinking Mathematics, 726 Learning Research, Development [illegible]enter, 3939 O'Hava St., Pittsburgh PA 15260, (412) 624-7469.

Little River Elementary School, 514 N.W. 77th St., Miami, FL 33150, (305) 754-7531.

Memphis City Schools, 126 S. Flicker, Memphis, TN 38104, (901) 454-0966.

National Urban Alliance for Effective Education, Eric Cooper, C/O Simon & Schuster, 15 Columbus Circle, 26th Floor, New York, NY 10023.

Pittsburgh Public Schools, Project Liaison, 53 S. Tenth St., Pittsburgh, PA 15203, (412) 431-5900.

Public School No. 41, Project SAIL, 411 Thatford, Brooklyn, NY 11212, (718) 495-7732.

Oyster Elementary School, 29th and Calvert Sts. NW., Washington, DC 20008, (202) 673-7277.

Santa Fe Public Schools, 610 Alta Vista, Santa Fe, NM 87501, (505) 982-2631.

Scott High School, Project SHAPE, 2400 Collingwood Blvd., Toledo, OH 43620, (419) 244-8303.

Wells Junior High School, P.O. Box 310, Wells, ME 04090, (207) 646-5142.

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